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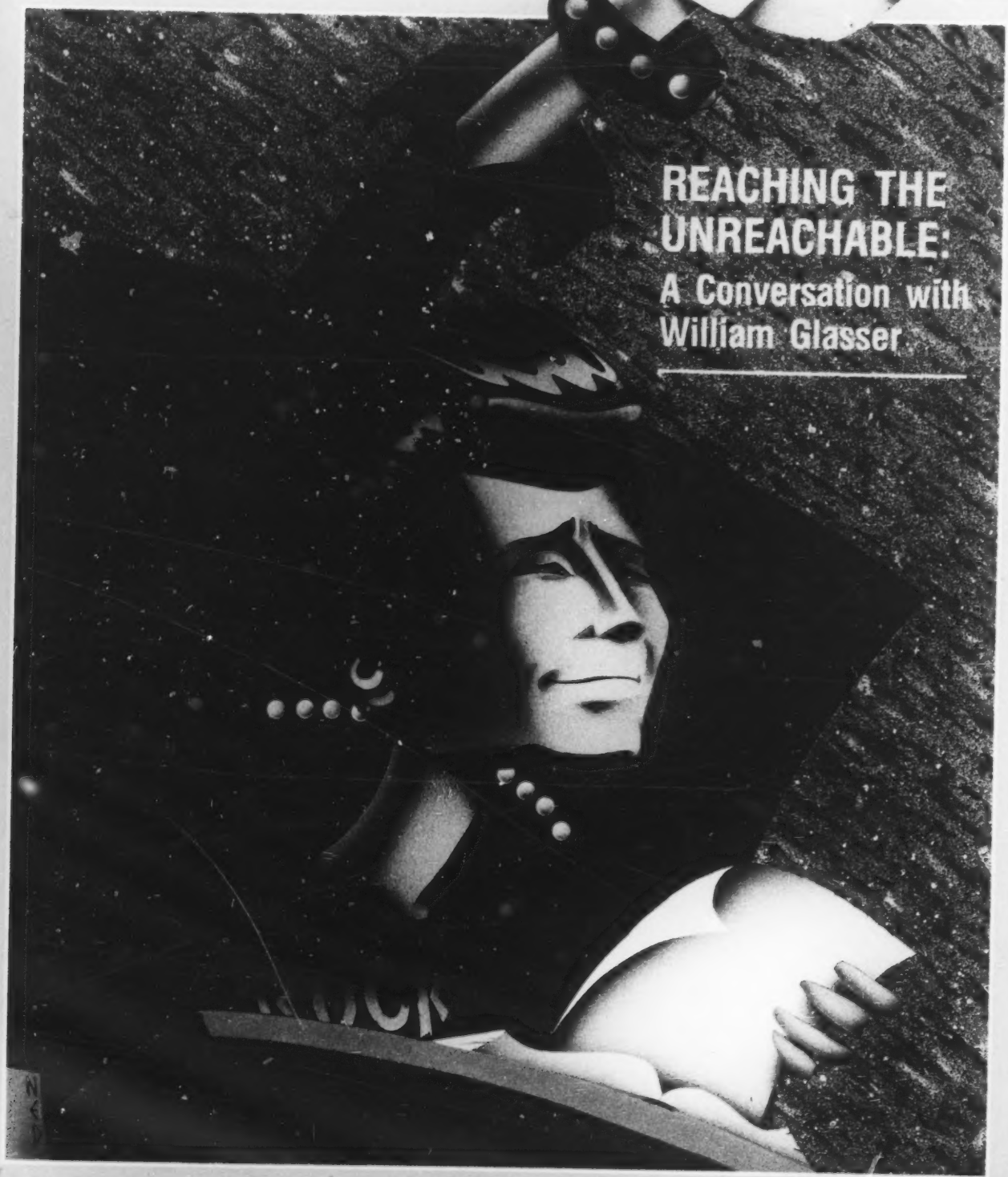
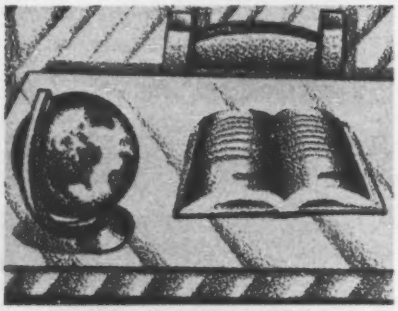


REACHING THE UNREACHABLE:

A Conversation with William Glasser



Phi Delta May 1987 • Volume 68 • Number 9

KAPPAN

FEATURES

656 **The Key to Improving Schools: An Interview with William Glasser,** *by Pauline B. Gough*

663 **A Teacher's Views on Cooperative Learning,** *by Roy A. Smith*

667 **Character Education and Clinical Intervention: A Paradigm Shift for U.S. Schools,** *by Perry London*

674 **Teaching Selflessness in a Selfish Society,** *by Thomas J. Lasley*

679 **The Merits of Measurement-Driven Instruction,** *by W. James Popham*

683 **Measurement-Driven Instruction: Catchy Phrase, Dangerous Practice,** *by Gerald W. Bracey*

687 **Muddle-Minded Emotionalism,** *by W. James Popham*

688 **The Muddles of Measurement-Driven Instruction,** *by Gerald W. Bracey*

690 **Taking the Terror Out of Research,** *by Robert Gable and Vincent Rogers*

696 **Laser Videodiscs in Education: Endless Possibilities,** *Royal Van Horn*

KAPPAN Special Report – Schoolchildren and Drugs: The Fancy That Has Not Passed, *by Richard A. Hawley*

DEPARTMENTS

650 **THE EDITOR'S PAGE,** Trickle-Down Recognition

652 **WASHINGTON REPORT,** *by Anne C. Lewis*

654 **STATELINE,** *by Chris Pipho*

701 **RESEARCH,** *by Gerald W. Bracey*

705 **DE JURE,** Supreme Court Holds That Contagious Diseases Are Handicaps, *by Thomas J. Flygare*

707 **IN EUROPE,** International Schools for International People, *by Michael G. Bruce*

708 **PROTOTYPES,** One Community's Response to the Dropout Problem, *by Genevieve H. Arnold and Vicki Biggers*

709 **BOOKS,** *Laurence D. Brown*

711 **NEWSNOTES**

718 **BACKTALK**

Cover Illustration: Ned Shaw

The Merits of Measurement-Driven Instruction

Measurement-driven instruction is the most cost-effective way of improving the quality of public education, claims Mr. Popham, one of its most stalwart defenders. Following this article, Gerald Bracey looks at MDI in a less flattering light.

BY W. JAMES POPHAM

IF PROPERLY conceived and implemented, measurement-driven instruction currently constitutes the most cost-effective way of improving the quality of public education in the United States. That's a pretty hefty claim. Let's see if the evidence supports it.

Of course, other effective ways of boosting the quality of public schooling exist. For example, if we were able to replace mediocre instructional materials with more potent, empirically proven alternatives, then pupils would surely benefit. Similarly, if we were to infuse into our current teaching force a host of well-paid, highly skilled teachers, we could surely expect major educational dividends.

But such strategies, though they are surely *effective*, are very costly. Because measurement-driven instruction (MDI) is an effective improvement strategy that is markedly less expensive, it is a far

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Illustration by Kevin Pope

more cost-effective strategy for improving the quality of public schooling. It is a strategy for instructional improvement that American educators should consider seriously.

MDI DEFINED

Before I consider the arguments and evidence in favor of measurement-driven instruction, let me define some terms and set the stage. Starting with definitions, *measurement-driven instruction* occurs when a high-stakes test of educational achievement, because of the important contingencies associated with the students' performance, influences the instructional program that prepares students for the test. There are two major types of high-stakes tests. One category consists of examinations that are associated with important consequences for examinees. Tests of this sort include those that qualify students for promotion to the next grade or for receipt of a high school diploma. The second type of high-stakes test consists of examinations whose scores are seen as reflections of instructional quality. Such tests include the many statewide achievement tests whose results are reported by local newspapers on a school-by-school or district-by-district basis.

Few educators would dispute the claim that these sorts of high-stakes tests markedly influence the nature of instructional programs. Whether they are concerned about their own self-esteem or their students' well-being, teachers clearly want students to perform well on such tests. Accordingly, teachers tend to focus a significant portion of their instructional activities on the knowledge and skills assessed by such tests. A high-stakes test of educational achievement, then, serves as a powerful *curricular magnet*. Those who deny the instructional influence of high-stakes tests have not spent much time in public school classrooms recently.

Although with less fanfare than during the late Seventies, when many states instituted high school graduation tests, high-stakes educational tests continue to be introduced. Every month or so we hear of another high-stakes test being established. Some of the most recently established high-stakes tests are examinations that prospective teachers must pass in order to be certified. Student assessment programs in Texas and California are being expanded to include more grade levels, and in more and more states – South Carolina and Texas, for example – tests are being used as requirements for high school graduation.

DIMENSIONS OF QUALITY

As I said above, MDI can be a potent force for educational improvement if *properly conceived and implemented*. What are the attributes of good measurement-driven instruction? Although there are surely other elements that might be incorporated into an effective MDI program, meeting the following five criteria will almost certainly guarantee that a program of measurement-driven instruction will have a beneficial effect.

Criterion-referenced tests. The chief virtue of MDI stems from the clarity with which instructional targets – that is, the skills and knowledge being tested – are described. Even skillful teachers cannot target their instruction if they are unaware of what the assessment targets are. Thus criterion-referenced tests, rather than norm-referenced tests, must be employed in a program of measurement-driven instruction because the descriptive clarity of well-constructed criterion-referenced tests gives teachers comprehensible descriptions of what is being tested. Norm-referenced tests, while useful for other important educational functions, lack the descriptive clarity required for purposes of instructional design. Although teachers have a general idea of what will be tested by norm-referenced examinations, there is too much descriptive ambiguity in such tests to encourage on-target teaching.

Defensible content. If measurement-driven instruction is to enhance the quality of schooling, its tests must assess genuinely defensible skills and knowledge. Why drive instruction toward trivial destinations? Sadly, a number of the minimum competency tests adopted in the late 1970s could have been more accurately labeled "most minimum imaginable" competency tests. The content of high-stakes educational tests should be subjected to intense scrutiny by all concerned clienteles, so that the tests measure truly worthwhile content. Because of the clarity with which the content of a criterion-referenced test can be defined, rigorous judgments can be rendered about whether or not that content is defensible. It is time for U.S. educators to pursue loftier curricular aspirations – aspirations that can be embodied in a high-stakes test.

A manageable number of targets. Too many instructional targets turn out to be no targets at all. Well-crafted high-stakes tests should not be used to assess a multitude of skills or objectives. Rather, in order for teachers to give meaningful attention to promoting the content to be tested, the number of assessment targets covered by the test should be in the neighborhood of five or 10. We learned an important lesson during the heyday of behavioral objectives. Teachers who are inundated with endless litanies of minuscule instructional targets will pay heed to none. A high-stakes test must focus on only a reasonable number of important skills or knowledge targets – targets sufficiently general to subsume enabling skills and content. A number of high-stakes tests in reading, for instance, assess only five or six truly essential skills, such as finding the "main idea" and drawing the correct "inference."

Instructional illumination. Although it is not widely recognized by the education community, criterion-referenced tests can be constructed in such a way that they actually encourage teachers to design effective instructional sequences. For example, a skill that requires examinees to make sophisticated discriminations can be assessed via multiple-choice items constructed according to carefully designed, *instructionally relevant* rules. Suppose that the correct answer to a multiple-choice test item must explicitly satisfy all of three positive criteria while violating none of four negative criteria. Because teachers who are informed of these criteria will recognize the importance of students' mastering them, it is likely that the seven criteria will be emphasized instructionally. Those who develop high-stakes tests for measurement-driven instruction must conceptualize the skills or knowledge to be tested in such a way that teachers can use the targeted skills and knowledge to design effective instructional sequences. In this way, well-made tests will function as catalysts to improved instruction.

Instructional support. Appropriately crafted high-stakes tests are a necessary, but not sufficient, condition for effective programs of measurement-driven instruction. Ample instructional support must also be provided to educators so that they can make the best use

Historically, testing has been something that teachers have thought about after instruction was over.

of MDI. During 1986, for example, Texas officials provided the state's educators with guides that outlined instructional strategies for all subjects tested statewide at grades 1, 3, 5, 7, 9, and 11. For each skill to be tested, the guides contain 1) a description of the skill, 2) an illustrative test item, 3) an analysis of how the skill might be taught, and 4) potentially useful instructional activities and exercises. Such materials to support instruction are needed if measurement-driven instruction is to work most effectively.

Historically, testing has been something that teachers have thought about only after instruction was over. Tests have been employed to determine how much students have learned, so that teachers could use this information to assign grades. For most teachers, test-making has been an end-of-instruction endeavor.

But with the advent of high-stakes testing, such traditional conceptions of measurement must be jettisoned. No longer can we view test development as an afterthought. Instead, educators must reconceive the relationship between measurement and instruction, so that tests are employed as vehicles of *instructional clarification*. Because high-stakes tests will surely function as instructional magnets, the challenge is to fashion those tests so that they become a potent force for educational improvement.

IS MDI NEEDED?

There's really little need to employ an improvement strategy, such as measurement-driven instruction, if all is well in American education. Those who believe that the quality of public schooling in the U.S. today is acceptable also believe that – despite isolated instances of instructional ineptitude – teachers are generally doing a decent job, students are spontaneous and creative, and most curricula embody a meaningful number of high-level goals. If I shared this belief, I would have little need to try to enhance the quality of education through the use of measurement-driven instruction or any other tactic.

I believe, however, that the quality of schooling in the U.S. is far from acceptable. Although there are pockets of pedagogical brilliance, far too many classrooms can be found in which teaching is intolerably weak – classrooms choked with irrelevant, time-filling activities that leave hordes of students bored, unmotivated, and lacking mastery of even the most basic skills.

Whatever the causes of such ineffectiveness, its consequences are visible whenever a high-stakes test is initially installed. Far too many students know far too little. In confirming such a perception, Chester Finn, assistant secretary for research and improvement in the U.S. Department of Education, recently characterized the performance of American students as "scandalously low."[1]

Critics of measurement-driven instruction often contrast its possible ill effects with a benign depiction of the success of public schools that simply doesn't square with reality. The merits of MDI must be honestly contrasted with what currently exists in the nation's classrooms. And what currently exists in the public schools needs improvement, not applause.

RESPONSIBLE CRITICISM

Those who would have U.S. educators reject measurement-driven instruction as a strategy to improve schooling must do more than simply trot out a horror story or two about its negative consequences. Of course, any effective tool can always be misused. A scalpel that can save lives when used by a skilled neurosurgeon can become a murder weapon in the wrong hands. That possibility, however, should not incline us to outlaw scalpels.

Critics of measurement-driven instruction must demonstrate, via argument and evidence, that this improvement strategy is so fundamentally flawed that it is either *certain* or *far more likely* to have negative rather than positive consequences. Proponents of MDI, on the other hand, must show that it stands a reasonably good chance of succeeding.

Let us briefly consider some of the more commonly voiced criticisms leveled at measurement-driven instruction. For the most part, these are specious attacks, lacking both analytic rigor and empirical support.

Curricular reductionism. It is alleged that measurement-driven instruction will necessarily lead to the pursuit of trivial, indefensible goals. Of course, this is not necessarily so. Why should we believe that public school educators – who, in their typical activities, pursue high-level goals – would suddenly, when creating a high-stakes test, aim exclusively for low-level goals? Basic skills are being measured in many student assessment programs because students do not possess such skills – not because they are the only skills that could be measured. High-stakes tests need not be directed only toward basic skills. In Pennsylvania and California, for example, new statewide "honors" tests have been established that deal with genuinely higher-order skills.

Curricular stagnation. Critics claim that the use of high-stakes tests will lock educators into an unalterable pursuit of the content being assessed by the tests. But such inflexibility is not necessary. Already a number of states – New Jersey and Connecticut, for example – have meaningfully refurbished their student assessment programs in order to assess more demanding skills.

Constrained teacher creativity. Critics contend that the pressures of instructional assessment will constrain teachers' spontaneity in the classroom. Yet for every teacher the critics can find whose creativity has been stifled by high-stakes tests, I'll produce many more who, because of those tests, waste far less of

"Some teacher! Doesn't even know the first three letters of the alphabet."

their students' time with irrelevancy and busywork. Creative teachers can *efficiently* promote mastery of content-to-be-tested and then get on with other classroom pursuits.

Lowered student aspirations. Some critics of measurement-driven instruction argue that the aspirations of students will be diminished because they will pursue only the skills and knowledge being tested. Tell that to a chemistry teacher whose students don't need to know chemistry for a statewide basic skills test. Would such a teacher be likely to implore students to "take it easy" because there's no chemistry content on the statewide test? Of course not. There's obviously more to school than what's covered on a high-stakes test. Teachers know this; students know this. And if the critics of MDI don't know it, they ought to.

Inappropriate role of tests. Some critics of measurement-driven instruction have argued that tests should follow, not lead, the curriculum. These critics contend that considering testing before determining curriculum is putting the cart before the horse.[2] It can be empirically demonstrated that a carrot-laden cart will provide a powerful incentive if placed in the path of an underfed pony. As I suggested above, educators need to abandon outmoded notions that testing must follow teaching. Properly conceptualized tests can provide the requisite clarity to make instruction more effective.

EVIDENCE OF SUCCESS

Happily, the case for measurement-driven instruction need not depend on rhetoric. During recent years a number of states and school districts have installed high-stakes educational tests in an effort to enhance the quality of local instruction. Table 1 presents improvements in the test performance of students in six states and one urban school district.[3]

Table 1 shows us that substantial improvements in student mastery of basic skills have been seen during the past half-dozen years. These percentage improvements represent the increased proportions of students who have displayed mastery of established standards – for example, a passing standard of 70% correct on a basic skills test. It is impossible to consider the evidence reported from these seven settings without concluding that, in situations in which measurement-driven instruction has been properly installed, improved student performance on high-stakes tests follows.

How would critics of measurement-driven instruction attempt to discount the sort of evidence presented in Table 1? For one thing, they would probably suggest that the skills measured by the tests aren't all that important; hence the reported gains aren't all that meaningful. But let us recall that these are *basic skills* and that improvements occur only when students display such skills who previously could not. In effect, no matter how low the level of the skills measured before the installation of measurement-driven instruction, students had not mastered them. After the advent of MDI, far more students can attain such fundamental skills.

It is particularly gratifying that measurement-driven instruction is apparently reducing the performance gap between majority and minority students. For example, between 1980 and 1984 in Texas, a disparity between the reading and mathematics skills of ninth-grade black students and white students was cut nearly in half. During a similar period, dramatic reductions in the difference between the performance of black students and that of white students have been observed in South Carolina. Connecticut officials report that the greatest improvements have been seen for minority and economically disadvantaged students in urban settings. Clearly, effective assessment systems can go a long way toward reducing differences between majority and minority students in the mastery of skills.

Properly conceived and implemented, measurement-driven instruction can constitute a potent force for educational improvement. Obviously, the installation of an effective program of measurement-driven instruction is not fool's play. Care must be taken to create an assessment system that does not produce the negative outcomes feared by critics.

Remember, truly ineffectual interventions usually give but small cause for alarm. Only when an intervention is sufficiently powerful to bring about changes, possibly the "wrong" changes, does it provoke resistance. In measurement-driven instruction we have a potent and cost-effective intervention that can substantially boost the quality of schooling in our nation. It's time to use it.

TABLE 1.
Improvements in Student Achievement Associated with Measurement-Driven Instruction

Locale	Subjects	Grade(s)	Period	Improvement (%)*
Ala.	3 R's	3,6,9	1981-86	1-13
	3 R's	11	1983-85	4-8
Conn.	3 R's	9	1980-84	6-16
Detroit	3 R's	12	1981-86	19
Md.	3 R's	9	1980-86	13-25
	Citizenship	9	1983-86	23
N.J.	Reading and Math	9	1977-85	16-19
	Reading and Math	10	1982-85	8-11
S.C.	Readiness	1	1979-85	14
	Reading and Math	1,2,3,6,8	1981-86	12-20
Tex.	Reading and Math	3,5,9	1980-85	7-14

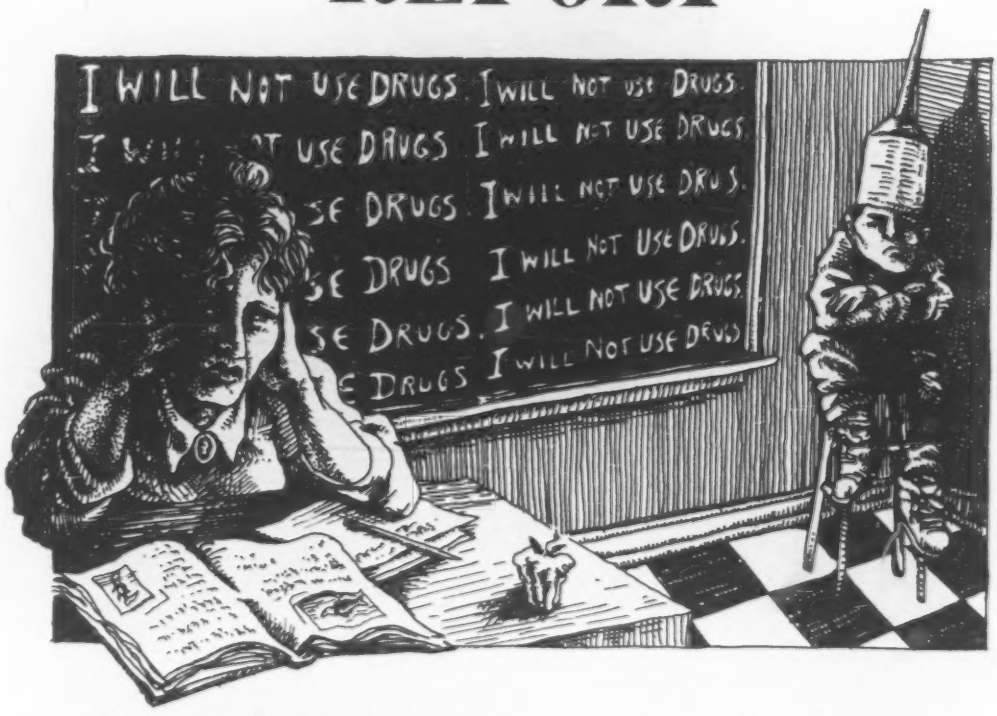
*Figures for improvement represent the increased percentage of students who have mastered standards of quality during the period in question. (For Alabama, in grades 3, 6, and 9, the percentage of improvement reflects test-score percentage improvements rather than improvements in mastery of standards.)

1. Finn's remarks were made during the Education Commission of the States/Colorado Department of Education Conference on Large-Scale Assessment, Boulder, Colo., June 1986.

2. Robert Calfee, "Establishing Instructional Validity for Minimum Competency Programs," in George F. Madaus, ed., *The Courts, Validity, and Minimum Competency Testing* (Hingham, Mass.: Kluwer-Nijhoff, 1983).

3. I am grateful to the following individuals for the information presented in Table 1: Anne C. Hess, Alabama; Douglas A. Rindone, Connecticut; Sharon Johnson-Lewis and Stuart C. Rankin, Detroit; Ann E. Chafin, Maryland; Stephen Koffler, New Jersey; Paul D. Sandifer, South Carolina; and Keith L. Cruse, Texas.

KAPPAN SPECIAL REPORT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Schoolchildren and Drugs:
The Fancy That Has Not Passed

BY RICHARD A. HAWLEY

I. BACKGROUND

COME NOW, haven't we schoolpeople heard *enough* about drugs? The question is more than fair. Stories about drugs in the print media — big busts, latest threats to health, controversial testing programs, involvement of celebrities — are so ubiquitous that each new one raises little more interest than the daily weather report. And most televiewers would agree that, if Geraldo Rivera made only one documentary on the subject, it would be one too many.

But while drug-related journalism may have lost the power to engage us, the issue of school-age children altering the course of development of their central nervous systems with toxic chemicals continues to command our immediate attention. However inured to it we have become, the "drug problem" has not gone away. In many regions and in whole school systems, student drug use is virulent. Nationwide it continues to be — and this is the technically correct word — epidemic.

According to the best and most far-reaching survey, Lloyd Johnston, Patrick O'Malley, and Jerald Bachman's *Drugs and the Nation's High School Students*, more than nine out of 10 members of the high school class of 1985 had used alcohol, more than half had tried marijuana (more than a quarter reported using it in the past month), one in six had used cocaine, and one in eight had used hal-

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Illustrations by Joe Lee

lucinogens, such as LSD. The great majority of drug-using children in the U.S. make their initial decision to try a drug between their 12th and 16th years — or between seventh and 10th grades.

When we consider that the metabolites of some commonly abused drugs, such as marijuana, remain active in the user's system for weeks, the implications for in-school behavior and performance grow ominous. In fact, in light of the figures for "recent heavy drinking" reported by the class of 1985 (45% of boys, 25% of girls), it seems statistically unlikely that on any given day there would be many American classrooms without *several* drug-altered students glassily meeting their teachers' expectant gazes.

Educationally and developmentally, this matters. It matters even more than whether students come to school underfed and underloved. For it is easier — much easier — to feed and to love and to teach a child than it is to reverse a pattern of drug abuse once it has begun. The most toxic effects of drug use have nothing to do with short-term stupefaction, nothing to do with "being high." The most toxic effects are not felt at all. The lodging of THC from marijuana in the fatty lining of a neuron is not felt by the user, nor is a teenager's passage from "experimental" drug use to "social" use, or from "social" use to chemical dependency.

Drugs are taken for the pleasurable feelings they produce — or are rumored to produce. A drug cannot create or alter feelings without chemically altering the functioning of the brain. Unfortunately, every external chemical known to produce changes in the nervous system also *damages* that system. There are no exceptions. There are no consequence-free drugs.

But while the brain is the principal organ affected by mind-altering drugs, it is an organ ill-equipped to register its own immediate impairment. The brain has no pain receptors: poke it, squeeze it, cut it, pound it, and it will not "hurt" (although the consequences will be otherwise dramatic). Because the brain doesn't hurt when it is injured, brain damage, whether caused by tumor growth, concussion, stroke, or drug abuse, often remains undetected until brain *function* is lost: speech, memory, movement, and so on. In the case of serious stroke, head trauma, or Alzheimer's disease, such losses are dramatic, but we should be no less attentive to losses caused by the use of alcohol and other drugs, even when those losses are subtler and are distributed over a longer period of time.

Most of us have observed a person in the process of getting drunk — a progressive pickling of the cortical functions. The subtlest and most elegant functions are the first to go: awareness of nuance, appraisal of consequences, responsiveness to time, place, and circumstance. A drink or two can reduce inhibitions. A few drinks in rapid succession knock out more basic functions: judgment, speech, motor coordination. Ultimately, consciousness itself is lost in the nervous system's last-ditch effort to preserve life. Occasionally, an impulsive or inexperienced drinker will take a fatal dose before losing consciousness. Yet, despite this progressive, easily observable impairment of brain function, the brain never once says ouch.

Herein, probably, lies the tenacity of the "drug problem." The impairment caused by many widely used drugs does not become obvious until an individual has become a confirmed user. Next to inhalable solvents, alcohol is probably the crudest of the nervous system depressants; its abuse is often followed by hangover — actually an indication of a healthy system working to expel poisons. But with more complex mind-altering drugs, such as marijuana, the hangover may be gradually distributed over days and weeks. The user may not link the uneasy, irritable feeling to marijuana at all, but rather to surrounding circumstances: family life, perhaps, or school.

Only when drug use has progressed to the point where a person's disposition and behavior are noticeably altered — to the "wasted" or "burned-out" condition — is it typically classified as a problem. And for more than a decade after the initial surge of illegal drug use in the Sixties, even the most dramatically and, as it happened, irreversibly "burned-out" individuals were often extolled for having *chosen* an alternative approach to life.

Tens of thousands of youthful chemical dependencies later, we know better — or we should know better. We should also know that, from an educational standpoint, the most abusive, dependent users are not the sole manifestation of the drug problem. The drug problem includes everything along the way. It includes the once-bright

suburban pot-smoker who, in an underchallenging high school program, is "doing fine." I have met, spoken with, and observed hundreds of such students in such unchallenging programs. I have seen high school juniors showing "no academic deficit" due to occasional marijuana use, as long as nothing new — nothing beyond a healthy seventh-grader's range — is required of them.

THE DESTRUCTIVE effects of student drug use on learning and on the conduct of schooling in general are by no means limited to the users themselves. Even a few drug-enervated students in a classroom will change the learning climate for everyone. Drug-altered children are largely impervious to classroom business; teachers are apt to see them as unprepared, preoccupied, hostile. Such students — and again, it only takes a few — tend to shut teachers down and push them toward less-effective teaching. Teaching drugged children is like acting or singing in the presence of hecklers or hosting a party at which a few of the guests are bent on having a bad time.

A competent teacher who works hard trying to engage chemically impaired nervous systems is working against the grain. It is no coincidence that "teacher burnout" — the term itself is derived from the drug culture — should have surfaced as a national issue directly in the wake of epidemic student drug use. It is instructive that in the mid-Seventies, when the phenomenon of "teacher burnout" emerged so explosively, teachers' salaries (adjusted for inflation) were higher, class sizes and student loads were generally smaller, and school programs were overall less routinized and rigid than they were in the relatively drug-free years before the mid-Sixties.

Drugs change the people who use them, and when the users are students or teachers, drugs change schools. The use of drugs, including alcohol, is illegal for almost all school-age children. The use of drugs also violates school rules and most household policies. Drug use and exchange is therefore always a furtive business. As such, it is an inherently divisive force in school life. It divides straight groups from using groups, divides students from the faculty and the administration, divides strict from permissive faculty members. Especially in the aftermath of an embarrassing bust, a drunk-driving death, or the publication of poor scholastic performance, drug use causes people to point fingers of accusation. School boards find principals and faculty members lax. Teachers label whole classes or whole generations hopeless. Students find the new school drug policy or newly formed parent network reactionary and repressive.

At the heart of such divisions is illegal drug use. A nearby public high school

asked me to advise on a drug-related problem that had lowered student and faculty morale to the point that the continuation of the daily school program was in some doubt.

The basic problem in this school was as follows. Considerable community, school board, and administration concern had been raised about the extent of drug use and drug dealing taking place on school grounds during school hours. A student-conducted survey confirmed that more than 50% of the students used illegal drugs to some degree and that a majority of those who used drugs did so during school hours.

Administrators, counselors, and faculty members reflected on the problem and decided that the bulk of the drug traffic taking place during school hours was happening in unsupervised places, both on and off the school grounds. Thus it was decided that the school's relatively relaxed "open campus" policy, which allowed most students to study and socialize wherever they pleased — and even allowed some of them to leave campus during their unscheduled time — had to go. Supervised study halls were instituted, many of them housed in the student cafeteria and containing hundreds of students whose seats were assigned. Trips to the bathroom or to the library required a special pass. The students, as one might imagine, reacted angrily to what they perceived as "Gestapo" tactics. And the non-using students, who had enjoyed their former liberties without breaking the rules, were the angriest. In this way the new policy united the "straights" and the "heads" in anti-authoritarian indignation.

With hindsight, it is easy to see what went wrong. The "blanket" solution of enforced study halls might have been improved had the student government or an open student forum been asked to propose a solution that would 1) stop illicit drug use *and* 2) preserve appropriate student liberty. The school administration could have taken this step without in any way compromising its resolve to eliminate drug use. The students needed help in seeing that student drug use, not their repressive elders, had caused the curtailment of their liberties. And while students were rather more comfortable reviling the administration than confronting one another about drug use, it was the latter, less comfortable process that eventually improved the climate of the school.

Apart from its general effects on a school's tone and quality, drug use has particularly demoralizing effects on particular organizations and activities. Quite recently I was asked to appraise a new athletic policy being tried out by a football coach at a prestigious independent school. The coach had read about drug-related effects on student performance, had attended drug education conferences, had weighed his own recent experiences with drug-using students, and had decided that he would like to take the firmest possible stand against drugs. With approval from the administration and the athletic department, the coach explained his feelings to his players and announced the new policy: his players were to be drug-free. No compromises. Each player was to sign a pledge, indicating that he would not use alcohol or other drugs for the duration of the season and that he would remove himself, or consent to be removed, from the team if he did.

The policy sparked some controversy and also a good deal of interest and support. The coach was generally admired for his stand.

But by the time I visited the school and talked to the team, it was mid-season, and the players seemed troubled. When they were comfortable enough to speak confidentially, it was clear that the policy was not the problem, but what had happened to it. Because they liked the coach, the players had stuck to the pledge for the opening weeks of the season. Then parties and other tempting situations combined to break the resolve of some of the players. They waited to see what happened. And nothing happened. Before long, more than half of the team had broken the pledge. Students began calling the new policy a "farce." The coach himself suspected from his players' attitudes that they had broken the pledge, but he did not know for certain. Everyone was demoralized.

The coach's stand and the drug-free pledge were not the problems. The players' subsequent violations merely pointed up the real problem: the players drank and smoked pot. They either could not or would not stop — not for their coach, not for team solidarity, perhaps not for anything.

IN THE TWO decades that drug use has been a central factor in the lives of school-age children, the phenomenon has changed and "matured" in some particularly unattractive ways. Much wishful thinking and misguided editorial writing to the contrary, no healing "decline" in student drug use has taken place. But that statement needs some explaining.

Student use of illegal drugs increased steadily through the Sixties and Seventies and reached a peak for most categories of drugs in 1979-80. At that point, more than one in 10 high school students reported smoking marijuana *daily*. In the following five years, 1981 through 1985, the use of drugs by students gradually fell off — with the exception of cocaine, the use of which continues to rise.

But this recent decline should occasion only guarded optimism, at best. The real statistical story is that students in 1985 are using drugs (again, with the exception of cocaine) at about the same rate as in 1975. For example, 47% of the high school class of 1975 indicated that they had "ever used" pot; 54% of the class of 1985 indicated the same. The numbers reporting recent marijuana use (27% of the class of 1975, 26% of the class of 1985) have remained fairly constant over the past decade. It is hard to be encouraged by reported declines in drug use when the levels remain so high.

There are other general features of

TABLE 1.
Percentages of High School Seniors Saying They Had Ever Used Certain Drugs

	Ever Used										
	Class of										
	'75 %	'76 %	'77 %	'78 %	'79 %	'80 %	'81 %	'82 %	'83 %	'84 %	'85 %
Marijuana/Hashish	47	53	56	59	60	60	60	59	57	55	54
Inhalants	NA	NA	NA	NA	19	18	17	18	19	19	18
Amyl & Butyl Nitrites	NA	NA	NA	NA	11	11	10	10	8	8	8
Hallucinogens	NA	NA	NA	NA	19	16	16	15	15	13	12
LSD	11	11	10	10	10	9	10	10	9	8	8
PCP	NA	NA	NA	NA	10	10	8	6	6	5	5
Cocaine	9	10	11	13	15	16	17	16	16	16	17
Heroin	2	2	2	2	1	1	1	1	1	1	1
Other Opiates	9	10	10	10	10	10	10	10	9	10	10
Stimulants	NA	NA	NA	NA	NA	NA	NA	28	27	28	26
Sedatives	18	18	17	16	15	15	16	15	14	13	12
Barbiturates	17	16	16	14	12	11	11	10	10	10	9
Methaqualone	8	8	9	8	8	10	11	11	10	8	7
Tranquilizers	17	17	18	17	16	15	15	14	13	12	12
Alcohol	90	92	93	93	93	93	93	93	93	93	92
Cigarettes	74	75	76	75	74	71	71	70	71	70	69

Source: National Institute on Drug Abuse, Monitoring the Future Study, 1985.

the drug epidemic that educators should note. One is a peculiar sort of Law of Unlimited Inclusion, according to which new drugs tend to be added to the illicit pharmacopoeia, but none is ever replaced. Thus pot and LSD, two of the most commonly used novelty drugs of the psychedelic Sixties, did not replace or even diminish the use of "established," legally available drugs, such as tobacco and alcohol. Nor has the more recent boom in the use of cocaine and "designer drugs" replaced pot or LSD.

This is not to say that, regionally and even nationally, the demand for particular drugs does not vary. It does. But the preference for individual drugs does not so much come and go, as it comes and goes and comes again. Two years ago streetwise kids in the city where I live were saying that "psychedelics" (read LSD) were out. But in the wake of a single sell-out Grateful Dead concert in the area, psychedelics have come back. This isn't a street rumor; this is the report of the families, schools, and treatment centers that have had to tend this newest crop of "Dead-heads."

None of this is meant to indict or belittle the efforts to fight drug abuse made by legislators, communities, schools, and parent organizations over the past decade. What declines have occurred in certain forms of drug use are almost certainly due to a growing consensus that drug use has no part to play in healthy child development. The consensus has expressed itself in a growing resolve to confront drug use, unpleasantness and all. The job, however, is barely begun.

II. HEALTHY CHILD DEVELOPMENT

TO THOSE with a vested interest in the physical, emotional, and intellectual development of children, the drug epidemic appears to have been designed with diabolical precision. Drugs block, retard, or distort the most crucial human capacities — perception, cognition, planning, physical coordination — and the loss of function is rewarded by surpassingly pleasurable sensations.

I noted above that American children are most likely to make their initial decision to try an intoxicating drug between the ages of 12 and 16: during the peak years of adolescent growth. During these years, every cell and tissue of the body is either altered or replaced altogether. Sexual potency, nearly all of one's adult skeletal stature, and the capacity for higher-order mental functions are produced during this developmental surge. The new mental attainments include the capacity to think abstractly, to interpret elaborate symbol systems (whether poetic or algebraic), and to deduce the present behavior needed to achieve a variety of future possibilities. With the exception of the first 18 months of life, adolescence is the most accelerated period of human growth. Unlike preverbal infants, however, adolescents are conscious — indeed, acutely and exquisitely *self*-conscious — of the changes they are undergoing.

Adolescents regard their new size, new sensations, and new capacities with a good deal of positive anticipation, but these same developments are also occasions for unexpected awkwardness, worry, and loss of personal control. Both the drama and the awkwardness of adolescence are developmentally necessary. Adolescents must define a new relationship to younger children and come to see themselves as former children. They must forge new relationships with their parents and with other adults in authority. There must also be an intensified relationship with the opposite sex.

So many changes would be challenging enough to manage if the onset and rate of adolescent development were uniform and predictable; in reality, though, adolescent growth is a capriciously uneven process. The appearance — seemingly always too early or too late — of adult stature, a croaking voice, a beard, breasts, or body hair can be the source of devastating self-doubt. All such changes are unbidden, and some seem revolt-

The long-term answer is to prevent drug abuse before it begins. This means placing programs in elementary schools.

Building Drug-Free Schools

TO ADDRESS the need to bring together all the important elements of school-based drug prevention (policy, curriculum, and working with the community), the American Council for Drug Education has developed *Building Drug-Free Schools*. This four-part drug-prevention program for grades K-12 consists of three written guides and a film. It is designed to provide school administrators, teachers, counselors, parents, and other community members with detailed information and suggestions for developing a new school-based drug- and alcohol-prevention program or for augmenting an existing program. The four parts of the program are outlined below.

I. Policy. This part of the program details why drug and alcohol use is a serious detriment to education and spells out specifically which policies have proven effective in reducing drug use. It addresses curricular requirements, the role of law enforcement, and suspension, expulsion, and intervention procedures.

II. Curriculum. This part of the program provides a unique K-12 curriculum with easy-to-use and age-appropriate learning activities. It includes essential information for teachers, such as the effects of drugs on health, the "high-risk" child, and the developmental basis for a drug-prevention curriculum. The curriculum shows the importance of avoiding dangerous "responsible use" messages, and it integrates the cognitive and affective dimensions of learning.

III. Community. This part of the program outlines specific techniques for enlisting the support of parents, businesses, religious groups, the media, medical professionals, fraternal organizations, and other community groups in reinforcing the drug-free message.

IV. Three Schools: Drug-Free. This part of the program is the film that accompanies the written guides. It features the principals of three schools, who describe how a clear and consistently enforced policy, an age-appropriate curriculum, and the involvement of the community have enabled them to significantly reduce drug and alcohol problems in their schools. The 29-minute film demonstrates for administrators, teachers, counselors, school board members, parents, and other community members that the goal of a drug-free school can be achieved.

The three guides that make up *Building Drug-Free Schools* are available for $50 a set. The film is available for purchase at $275 (16mm) or $225 (videotape) or for rental at $35. For more information or to place an order, contact the American Council for Drug Education, Department K, 5820 Hubbard Dr., Rockville, MD 20852. Ph. 301/984-5700.

ing: new smells, regular eruptions of skin blemishes, oily hair, the onset of menstruation, the annoyance of irrelevant erections.

Developments that seem trivial from an adult perspective — for example, having the wrong kind of shoes — can imperil an adolescent's basic sense of well-being. Life itself has been known to hang on only slightly weightier issues: being in or out of the group, being on or off the team, being datable or not. Steering a survivable course through first love, first intimacy, finding oneself *adequate* — these are momentous challenges in adolescence. Each will arouse terrific stress, and the adaptive management of that stress *is* maturation. The only way out of adolescence is through it. Chemically anesthetizing oneself with drugs serves only to delay this maturation — or in some cases to replace it altogether — often with lifelong consequences.

ALONG WITH THE rapidly unfolding physical development in adolescence comes the capacity for new forms of thought. Measured on an electroencephalograph, an adolescent brain can put out faster, more "adult" brain waves than that of a preadolescent. Adolescents can perceive new gradations of color and musical pitch. They can see allegories in stories that were once understood only as literal narratives. Adolescents can understand whole systems (cellular systems, body systems, political systems, solar systems), make predictions about them, and draw inferences from them. Adolescents are able to pursue higher mathematics, advanced physics, and other sciences that proceed deductively from their own axioms; these theoretical disciplines need not bear any demonstrable relationship to observable reality.

The most profound capacity for moral thinking can emerge during adolescence. Cognitively, this amounts to projecting oneself imaginatively forward and backward in time, plotting hypothetical actions and their potential outcomes, referring the outcomes to feeling centers for evaluation, formulating plans, and then executing reasoned, purposeful actions.

All this staggering complexity and elegance comes into play only if adolescent development is healthy, not polluted and impaired by drugs. If we step back and take a long look, we can see child development as a continuous process in which 1) simple mental structures are superseded by complex ones, 2) exclusively self-directed motivation and behavior becomes, at least in part, other-directed, and 3) utter dependence on nurturers develops into personal autonomy and one's own capacity for nurturing. Again, this is the direction of *healthy*, not necessarily typical, development.

Healthy maturation requires a capacity for managing pleasure. In other words, pleasure must be understood as a consequence of a good, not as an unqualified good in itself. The most reinforcing sensual pleasures — such as eating and sex — have evolved, I suspect, to promote such essential human purposes as survival, reproduction, and pair bonding. The non-sensual pleasures — such as pride, elation, and joy — have no doubt evolved to promote essential personal and social goods. But when pleasure is abstracted and pursued as an end in itself, people encounter such troubles of self-indulgence as obesity, promiscuity, emotional instability, and addiction.

Aristotle addressed the role of pleasure management in child development with remarkable clarity. His prescription has been revived intermittently through the centuries, most forcefully by Montessori and Dewey. Aristotle's point was that children must be "habituated" to desirable behavior — attending to tasks, sharing, telling the truth — before they can understand theoretically the benefit of doing so. By the time a developing child is able to understand why, theoretically, "honesty is the best policy," he or she may have internalized a pattern of truthfulness or deceit that is impervious to the more recently acquired, higher-order "theory." The standard educational rewards for desirable behavior are mastery, recognition, and praise. These rewards *follow* and thus reinforce the desired behavior.

Drug use inverts the healthy model. Complex thinking becomes simpler, distorted, even pathological — and not just while the user is high. Awareness of others and of the environment is replaced by euphoric, stupefied self-centeredness. Stress management is replaced by anesthetizing bad feelings or by chemically triggering good ones. Natural controls on pleasure are circumvented by chemicals that create rewarding sensations. In this way, essential developmental processes are not only reversed, but the *loss* is rewarded by indescribably compelling pleasure.

This is the real drug problem. It is also a disease and a sure sign of cultural deterioration. Because drug use runs so directly against the aims of education, school communities should not be reluctant to reestablish controls over the environment in which developing children make decisions. As current analysts have pointed out repeatedly, we are not enjoying a scholastic Golden Age.

III. HISTORICAL PERSPECTIVE

THE USE of alcohol and other intoxicating drugs in America extends back past the European settlement of the New World. Native Americans in the Southwest used naturally occurring hallucinogens in religious rites. The earliest dwellers in the high country of the Andes used coca leaves as a medicine and to achieve religious trances. The peoples of ancient China and India used cannabis (marijuana) for similar purposes. Down through the modern centuries, neither "white drugs" (those derived from opium) nor "brown drugs" (those derived from cannabis) made much of an impact on the culture of the West, where the preferred intoxicant was alcohol, in either distilled or fermented form.

The opiates, cannabis, and, after it was chemically extracted from the coca leaf in 1859, cocaine were contained in prescription and patent medicines in the 1800s. Cocaine was tried and found wanting as a local anesthetic. Freud initially used cocaine to relieve nervous disorders, but he later vilified the drug as a destroyer of health. It is also true that small amounts of cocaine were included in the original formula for Coca-Cola, but the drug was removed shortly after the turn of the century when cocaine was identified as a threat to health. The use of alcohol has also been intermittently accepted, regulated, deregulated, prohibited, and tolerated.

So drug use itself is not a late-20th-century novelty. The novelty is the *number* of people — especially young people — who are involved. There is no historical precedent for such phenomena as millions of school-age children using cannabis, cocaine, LSD, and other mind-altering drugs.

The reason the drug epidemic erupted in the mid-Sixties probably had less to do with the contemporary issues with which it is most often linked — protest over the Vietnam war, agitation for civil rights, and frustration with a repressively structured society — than it did with the fact that millions of baby-boomers were coming of age at the same time. As the Sixties turned uneasily into the Seventies, for the

first time in American history there were more people under than over 25. An unprecedented proportion of them were clustered on college campuses, where adult presence was so minimal as to be unfelt, where a world of radical brotherhood and sisterhood was less rhetoric than daily reality.

A recurrent theme of the youth culture of the Sixties was a plea to sustain adolescence, not to complete the compromising passage into adulthood. In *Do It!*, his manifesto of the counter-culture, Jerry Rubin boldly stated the general aim: "When we're thirty-five, our ambition is to act like we're fifteen." In the Sixties, to act like a 15-year-old obliged one to defy standard conventions of dress, grooming, language, and public deportment. It also obliged one, perhaps most enduringly, to flout the conventional taboos against illicit drugs, especially pot and LSD. The older, pre-Sixties beats and hipsters became models for throngs of hippies, and within a year or two the long-standing barriers that had separated drug users from straight society had broken down.

Even the best programs can be subverted by the absence of strong, clear institutional policies forbidding drug use.

From the standpoint of public health, the American drug epidemic has caused such severe problems because it had a decade's head start on any sustained, informed attempts to check it. Drugs were not merely used, they were extolled enthusiastically by the people and through music, the medium closest to the heart of the youth culture. The Beatles sang cheerily of "getting high with a little help from my friends," while the cast of *Hair* proclaimed the drug-lit profundity of "walking in space," explaining, "in this way we rediscover sensation."

Meanwhile, in 1965 a team of Israeli scientists investigating the 420-plus chemicals composing marijuana isolated the one, delta-9 tetrahydrocannabinol (THC), that is most responsible for making users high. THC was further found to have some worrisome features. It lodged itself in fatty tissues all over the body, including the brain. It blocked healthy cell function and, over time, destroyed cells. It was a poison.

By the early Seventies, a federally funded project at the University of Mississippi was growing, under government supervision, a uniform grade of marijuana (about 2% THC) to be used in animal and human tests. With uniform marijuana available for tests, reliable, replicable studies could be made of the drug's effects on behavior and on cells, tissue, and vital human systems. Beginning in the mid-Seventies, improved and more persuasive studies were available, and important research is still under way.

But by the time the scientific and medical communities had begun to voice concerns about the health effects of marijuana and other drugs, patterns of drug use and supply were already deeply entrenched. Old, discredited research claiming the relative mildness or harmlessness of marijuana clashed with claims of its dangerous toxicity. Findings from casually conducted surveys were opposed to findings about cell metabolism. Small, dubious samples of ganja-smoking Jamaican cane farmers were used to suggest the relative safety of pot smoking among North American high school students. "Experts" appeared to disagree. Confusion reigned, and under the umbrella of so much confusion and controversy, drug use continued apace, reaching peak levels among high school students by 1980.

Slowly, however, a broadly based coalition of those opposed to illegal drug use began to make itself heard nationwide. The first people to organize and to articulate an anti-drug stand have been, appropriately, the ones among whom drug use has come inescapably to rest: families, schools, the staffs of drug treatment centers. National organizations, such as the Parents Resource Institute for Drug Education (PRIDE) and the National Federation of Parents (NFP), as well as regional movements, such as the Texans' War on Drugs, have made impressive progress in making freedom from drugs a goal for families, schools, and whole communities.

Yet even so agreeable-sounding a goal as "drug-free youth" is not as easy to sell as it may seem, particularly if "drug-free" is taken to mean "alcohol-free." There are handsomely printed books and curricular programs aimed not at "drug-free youth" but rather at the "responsible use" of drugs. Indeed, even as I write, the most widely distributed curricula for drug education in the country stress making considered responses to drugs. But these programs do not come out in favor of refusing to use drugs altogether.

LET ME PAUSE for a moment. For there is perhaps no greater indication of the inroads drug use has made on contemporary thinking than the fact that authoritative voices on the national education scene are endorsing *responsible levels* of criminal, not to mention health-endangering, activity. How does this reasoning translate into other areas of problem behavior for adolescents? Why not responsible levels of vandalism, assault, or reckless driving? Teenagers have problems with these behaviors, too, though they claim far fewer lives and sacrifice far fewer futures than drug abuse does.

Am I exaggerating? Readers who feel that I'm merely knocking down a straw man should consider the following. In Ruth Eng's 1979 book for teens, *Responsible Drug and Alcohol Use*, the chapter titled "Hints for the Responsible Use of Marijuana" cautions readers to smoke with friends, to sort the seeds out of their stash, to use clean smoking paraphernalia, and to avoid burning lips or carpets.

Andrew Weil, whose 1972 paean to drug-enhanced consciousness, *The Natural Mind*, was reissued last year, also collaborated with children's book author Winifred Rosen in 1983 to produce another drug book pitched to children: *Chocolate to Morphine: Understanding Mind-Active Drugs*. The first chapter, titled "Straight Talk," begins arrestingly, "Drugs are here to stay." The authors continue, "Drug education as it now exists is, at best, a thinly disguised attempt to scare people away from disapproved substances by greatly exaggerating the dangers of these substances." Young readers are advised to "question your parents about the drugs they use. Maybe they will agree to give up theirs if you will give up yours. If you can convince them that your

drug use is responsible, you may be able to allay their anxiety."

Parents, too, are given counsel by Weil and Rosen. "Don't make your child feel it is wrong to get high," they argue, because "there are no bad drugs, only bad relationships with drugs." The authors look forward to the day when drug use will be woven comfortably and continuously into the fabric of ordinary life: "We have seen parents in good relationships with marijuana let their children take occasional puffs of joints in much the same way that some Jewish parents allow their children ceremonial sips of wine."

In 1986 Susan and David Cohen, another team of writers for teenagers, wrote an accessible guide to teen drinking called *A Six Pack and a Fake I.D.* The authors make some clear attempts at fair-mindedness, and they offer some informed cautions about alcohol abuse. But they couldn't quite bring themselves to advise their readers to obey drinking laws. Of drinking parties, they write:

> If you're planning a drinking party, and your parents accept the idea, then at least try to make your party a safe, pleasant, and interesting one, instead of a drunken bash. . . . Don't overdo the amount of alcohol in the punch and don't let anyone else add to it.

If the party doesn't run too long and if provisions are made to get drunken guests home, "so far so good. You have behaved responsibly." In the book's final chapter, titled "Summing Up," there appears the incongruous caveat, "Adults who knowingly supply alcohol to minors may be liable to criminal penalties." (No doubt the publisher's legal counsel is responsible for this terse warning.)

There is a little craziness in these discussions of "responsible" law-breaking. I suspect that Weil would be both vocal and indignant if the teens (and their parents) in his neighborhood were exhorted to curtail his right of free speech or to threaten his person. Yet why, from the standpoint of those who genuinely feel that Weil is a social menace, should the laws respecting his welfare be taken more seriously than the drug laws he so energetically maligns?

It would be a mistake to dismiss the "do it anyway" drug message as a feeble cry of left-over voices from the Sixties. These books and similar school curricula continue to appear in the mid-Eighties. Nor are they the products of dingy underground presses. Macmillan brought out *Responsible Drug and Alcohol Use*, and Houghton Mifflin published both *The Natural Mind* and *Chocolate to Morphine*.

There is considerable optimism in drug education circles today about the anticipated gains to be made as a consequence of the Reagan Administration's Anti-Drug Abuse Act of 1986. If funded, this act is supposed to provide millions of dollars to schools for drug-related programs and materials.

But what materials? Very few comprehensive K-12 curricula come out clearly against the recreational use of drugs. Most of them aim to boost self-esteem and clarify values and decision making. Their stated goal is typically that students will learn to make informed, responsible choices about drugs. Most of them do not suggest that the informed, responsible thing for a child to do is to say no to drug use. In other words, there is nothing built into the new Anti-Drug Abuse Act to insure that existing patterns of drug use will not be reinforced by federal funds. It will take alert, informed school boards, principals, curriculum coordinators, and faculty members to prevent such a development.

IV. SCHOOL STRATEGIES THAT WORK

ONCE AGAIN I must stress that American education is not in the midst of a Golden Age. Schools are drug-ridden, and this is exacting an educational toll. Daunting though it may be, drug use by young people is a problem that can be beaten. Schools have been drug-free in the still-recollectable past; they can be again. Indeed, many have already begun.

Some prescriptions follow for changing the drug climate in the schools. Let me say at the outset that the policies I propose are my own passionate preferences, but they also happen to coincide with the positions of the American Council for Drug Education, the National Federation of Parents, the Parents Resource Institute for Drug Education, and the Texans' War on Drugs, among other national and regional organizations.

• **The school's commitment must be to become drug-free.** This is a basic premise and a value-laden choice. It generates one kind of policy and program; other premises — to cut down on the levels of drug use or to help students make responsible drug choices — lead to different policies and programs. Robert DuPont, one of the clearest voices in the field of drug abuse prevention, likes to tell school faculties, "Every school will have precisely the amount of drug use that it tolerates."

It is only a sign of the times that the goal of maintaining drug-free schools is sometimes challenged as "unrealistic." The very mission of universal education requires a drug-free atmosphere for learning. Schools mobilize their energies and their money impressively to remove asbestos from the learning environment. And if the lives of a student or two were threatened by toxic shock, the suspected brand of tampons and the machines that vend them would be cleared out of the schools at once. But such threats will not take even a statistically measurable toll in student health and life. Drug use, by contrast, is taking a ghastly toll right now. Practically every reader of this article is acquainted personally with a casualty, if not a fatality, resulting from drug use. Allowing such a state of affairs to exist is inhumane — and "unrealistic."

• **Leaders must endorse, articulate, and stand by a school's commitment to be drug-free.** The responsibility for changing a school's drug climate should be widely shared, but it cannot be delegated. Especially in the early stages, a tough stand on drugs will involve confrontations, dispensing bad news, and taking criticism. If the "drug problem" becomes the special assignment of an assistant district superintendent or of a school's dean of students or of a special faculty task force, those people are likely to be seen as the district's or the school's drug fanatics, and school leaders will be asked to mitigate and temper drug policies that some may find uncomfortable. Maintaining a disinterested stance and keeping a reasonable distance from the problem by delegating the making of drug policy to others will seem the easier course to a school leader. But doing so is almost certain to impede the process of ridding the schools of drugs.

• **Preventing drug abuse is easier, more educational, and more fun than remediating drug problems once they exist.** Prevention, intervention, and treatment are all essential ingredients of anti-drug abuse policies, but prevention is by far the most promising approach. Unlike older, more stable drug abusers, adolescents pass from experimental drinking bouts to full-blown chemical dependencies in a matter of months. The news from the facilities that treat young drug dependents is frankly discouraging. The majority of those who have been treated lapse back into drug abuse. Even among those who persevere and remain drug-free, the reinte-

gration into family, school, and community is not easy. Moreover, a newly described clinical syndrome, PDIS (Post-Dependence Impairment Syndrome), suggests that recovering dependents show abnormally high tendencies to chronic illness, injuries, learning difficulties, and depression.

The long-term answer is to prevent drug abuse before it begins. Schools are most likely to succeed in achieving this aim if they allot more and better instructional time to drug education *before* children confront the choice of whether or not to use a threshold drug. This means installing programs in elementary schools. Some exercises in such programs will be very basic and prescriptive: saying no. Some exercises will be affective: how to say no and how to avoid drug use and other harmful situations. Some lessons will be informational: what is safe and what is dangerous; what are the effects on the human system of various legal and illegal drugs. Special emphasis should be given to cigarettes, alcohol, marijuana, and inhalants, because these are the most prevalent threshold drugs.

However, even the best educational programs can be subverted by the absence of strong, clear institutional policies forbidding drug use. For the great majority of school-age children, adherence to the "rules" and observance of the law are the highest categories of ethical thought. Schools tend to stress the enforcement of those policies about which they care most strongly. Drug education must go hand in hand with an anti-drug policy.

Weary voices stating that "drug education" and "information" have proved ineffectual as ways of preventing drug abuse are misinformed and mistaken. A systematic, prevention-based program of drug education has barely begun nationwide. The drug epidemic arose in the absence of such educational measures, not despite them.

• **Changing the drug climate of a school begins with building a consensus among members of the faculty and staff.** School staffs whose members are divided among themselves cannot stand firm against student drug use. They will be divided in the same way inconsistent parents are divided. Building a durable consensus is apt to require some learning on the part of faculty members about the biomedical effects of drugs and about their special effects on developing children. This learning may require some high-quality inservice training. The trainers and the materials they use should endorse the goal of a drug-free school. The entire faculty and staff (K-12) of a school system should be included in policy making and program building. Drug education is not the special business of health teachers and science teachers. The support of coaches and advisors is especially crucial to an effective school- or systemwide drug policy.

• **Faculty members and staff members must limit their own drug use to what is lawful and consistent with effective performance.** Employee Assistance Programs (EAPs) for faculty and staff members with drinking and other drug problems are increasingly common in both public and private schools. Adults who have been treated through EAPs and who have remained in their posts tend to bolster rather than undermine the overall morale of a school; at the same time, their presence underscores the school's commitment to be drug-free.

• **Drug-free means alcohol-free.** Alcohol is the principal drug of abuse among U.S. schoolchildren. It is the preferred drug of the majority of chemical dependents, and its use is more likely than any other disease, accident, or activity to lead to the violent death of young people. School faculty members must be educated to respond to the standard defenses for and denials of underage drinking: How much harm is there in a little? I don't want my son or daughter going off to college inexperienced. Well, if they're going to drink, I at least want them to do it here where I can watch them. Hell, I used to throw back a few myself. At least it's only alcohol. At least it's only beer.

Alcohol is the problem, not the form in which it is taken. A can of beer, a typical glass of wine, and a Scotch and soda served at a bar each contains about an ounce of alcohol. Two consecutive ounces of alcohol consumed by a 5-year-old can kill the child. The same dose is highly toxic to a middle-schooler. Growing children are in the process of developing controls that might allow them to drink moderately as adults; alcohol and other drugs *replace* these controls. The loss of performance, health, and life of young drinkers is well-documented and obvious. Against these losses, no positive benefits have been adduced. Camaraderie?

Fellowship? Go *observe* the middle-schoolers in the basement rec room or the high school crowd at the rumored three-kegger at the home of a student whose parents are out of town. Observe, and perhaps clean up.

V. A PERSONAL NOTE

ALTHOUGH MY professional responsibilities are to direct a high school and my out-of-school preoccupations tend to be literary and musical, over the past 10 years I have done a good deal of writing, speaking, and conferring about drug-related issues. I never intended to do this, but, given my involvement with young people, I suppose an immersion in drug issues was inevitable. Sometimes I do wonder, though, whether I am coming to see the world through a drug-clouded lens. I have met some people who, it seems to me, have reduced all the world's problems to the drug abuse of American teenagers.

I don't want to become this way, and I try hard to maintain my balance. But I do read the paper. And on the morning that I wrote this paragraph these were the headline stories in the *Cleveland Plain Dealer*.

The leading national news was the revelation that the crew members of the Conrail train that collided disastrously with an Amtrak passenger train were under the influence of marijuana. Locally, the dominant story was the continuing investigation of a convicted drug dealer and police informant who apparently received protection from the Cleveland police force to sell cocaine in the inner city, provided he turned the profits over to the department, which then used the funds to pay for the biggest drug bust in the city's history. A curious sort of ethic at work here.

The sports coverage was replete with Brian Bosworth's indignation that his use of steroids had barred him from NCAA football competition. He claimed that pot-smoking athletes got away with murder because their positive drug tests could be interpreted as "passive inhalation" of other people's smoke.

As I said, I was pressed for time and had to get moving, but I glanced at one more story, one that was given less prominence. It summarized a survey of internationally prominent education experts who were asked to appraise the relative effectiveness of the teaching in six nations of math, science, social studies, foreign language, and each nation's own language. Japan and West Germany were rated highest; the U.S. fared poorly. In math and science we were ranked second to last, and in the teaching of our own language we ranked last.

Hmm. Television? Affluence? Poverty? Permissiveness? Restrictiveness? Outmoded pedagogy and curricula? Existential ennui? Angst? Ask on. K

NOTE

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